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10/081,560	02/20/2002	Michael Ely	0600/96785	1990

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EXAMINER
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NGUYEN, MINH CHAU

ART UNIT	PAPER NUMBER
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2145

MAIL DATE	DELIVERY MODE
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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/081,560	Applicant(s) ELY ET AL.	
	Examiner MINH-CHAU NGUYEN	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

This action is responsive to the amendment of the applicant filed an RCE on 08/17/07. Claims 1-20 are presented for further examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4,6,8-13,15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogart et al. (Bogart) (US 6,978,247 B1), and further in view of Grove et al. (Grove) (US 6,820,133 B1).
2. Claim 1, Bogart teaches a business contact center (i.e. multimedia customer contact center 100) for interfacing customers with a business, and the business contact center comprising:
  - a plurality of media handlers (i.e. handlers 200-212 in figure 2) each including a control interface (i.e. interface 110) and each of the plurality of media handlers configurable via the control interface to define a plurality of media services (i.e. "each handler is adapted to handle a specific one or more media (i.e. services)) including at least one of routing media between selected media endpoints (i.e. "handlers 200-212 provide switching...They establish connections between contacts and resources"), recording made from a selectable media

source, and playing selectable media to a selected media endpoint (abstract; and Col. 1, L. 54-Col. 2, L. 67; and Col. 5, L. 30-Col. 6, L. 67);

a conference controller (i.e. communication layer 106 in multimedia customer contact center 100 in figure 1) coupled with each of the plurality of media handlers (i.e. handlers 200-212 of a contact layer 104 in figure 2) via the corresponding control interface (i.e. interface 110), and the conference controller responsive to a customer contact to configure via the corresponding control interface an available one of the plurality of media handlers to define selected ones of the media services (i.e. a service call), media sources (i.e. resources/agents) and media endpoints (i.e. customer contact such as phone, computer, etc.) for handling the customer contact (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21), the controller including a bandwidth manager (i.e. "the communications layer comprises software for managing communications each comprising one or more contacts in one or more media", thus a bandwidth manager is a software) which responses to the customer contact and selects an available one of the media handlers (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59)

Bogart fails to teach the bandwidth manager estimates a bandwidth requirement of the customer contact and selects the available one of the media handlers based upon a lowest media handler bandwidth load. However, Grove, in the same field of endeavor having closely related objectivity, teaches the bandwidth manager estimates a bandwidth requirement of the customer contact

(i.e. estimating the bandwidth requirement to have optimization of communications performance) (Col. 6, L. 15-25; and Col. 15, L. 64-Col. 17, L. 24) and selects the available one of the media handlers based upon a lowest media handler bandwidth load (i.e. "the mapping device may choose among C-nodes for that client by selecting the C-node with the lowest estimated average communication time (or download time)", it does disclose selecting the C-nodes (i.e. media handlers) based upon the lowest C-nodes whose has lowest communication time (it is equivalent to bandwidth load)) (Col. 17, L. 5-24).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Grove's teachings of the bandwidth manager estimates a bandwidth requirement of the customer contact and selects the available one of the media handlers based upon a lowest media handler bandwidth load, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of tracking and limiting the amount of traffic bandwidth on the network.

3. Claim 2, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches wherein the bandwidth manager (i.e. "the communications layer comprises software for managing communications each comprising one or more contacts in one or more media", thus a bandwidth manager is a software) manages media handler selection (i.e. handlers 200-212 of a contact layer 104 in figure 2) for each customer contact (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-

59). Besides this, Grove teaches comparing the bandwidth requirement to current bandwidth availability on each media handler (i.e. comparing the estimate of the distance between the source and each C-node (i.e. media handler) which includes the bandwidth charges for the client) (Col. 16, L. 21-Col. 17, L. 5).

4. Claim 3, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the conference controller (i.e. communication layer 106) further comprises: an event handler (i.e. contact layer 104) for determining a next media event for a customer contact based on a correlation between pre-defined call contact states and status and actual call status (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46).

5. Claim 4, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches a plurality of agent communication devices (i.e. resources/agents 220) each having a control interface (i.e. interface 111) coupled to the control interface of the conference controller (i.e. communication layer 106) wherein each of the plurality of agent communication devices is configurable via the corresponding control interface to couple with a selected one of the plurality of media handlers (i.e. handlers 200-212) (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59).

6. Claim 6, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches each of the plurality of agent communication devices further comprises: an agent interface for accepting input from an agent of requests (i.e. resources/agents 220) and for passing the requests to the conference controller (i.e. communication layer 106) via the control interface to manage a customer contact session (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59).

7. Claim 8, Bogart teaches a method comprising:

selecting at a conference controller (i.e. communication layer 106 in multimedia customer contact center 100 in figure 1) an available one of a plurality of media handlers (i.e. handlers 200-212 in figure 2) for handling a call with the calling one of the customers (figure 2; and Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

passing call parameters (i.e. contact preferences) (Col. 5, L. 4-15) for handling the call with the calling one of the customers from the conference controller (i.e. from a contact layer 104 in multimedia customer contact center 100) to the available one of the media handlers (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21),  
and

configuring the available one of the plurality of media handlers (i.e. determining an available one of a plurality of resources which is allocated for use to a particular handler. In other word, once the resource is available, it implies the

handler is available) for selected ones of a plurality of media services (i.e. a service call), media sources (i.e. resources/agents) and media endpoints (i.e. customer contact such as phone, computer, etc.) for handling the customer contact, responsive to the passing of the call parameters in the passing act (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 4-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

Bogart fails to teach estimating a bandwidth requirement and selecting based upon at least the bandwidth requirement. However, Grove, in the same field of endeavor having closely related objectivity, teaches estimating a bandwidth requirement (i.e. estimating the bandwidth requirement to have optimization of communications performance) (Col. 6, L. 15-25; and Col. 15, L. 64-Col. 17, L. 24) and selecting based upon at least the bandwidth requirement (i.e. "the mapping device may choose among C-nodes for that client by selecting the C-node with the lowest estimated average communication time (or download time)", it does disclose selecting the C-nodes (i.e. media handlers) based upon the lowest C-nodes whose has lowest communication time (it is equivalent to bandwidth load)) (Col. 17, L. 5-24).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Grove's teachings of estimating a bandwidth requirement and selecting based upon at least the bandwidth requirement, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of tracking and



limiting the amount of traffic bandwidth on the network.

8. Claim 9, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the method for interfacing customers, further comprising in response to the configuring act, at least one of the following acts performed on the available one of the plurality of media handlers of

routing media between selected media endpoints (i.e. "handlers 200-212 provide switching... They establish connections between contacts and resources") (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59);

recording media from a selectable media source (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59); and

playing selectable media to a selected media endpoint (Col. 1, L. 54-Col. 2, L. 67; and Col. 4, L. 22-54; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-59).

9. Claim 10, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the call setup parameters passed in the passing act include at least outbound media ports (Col. 9, L. 22-42; and Col. 13, L. 65-Col. 14, L. 43) and a media service type (Table F, Col. 15, L. 56-67).

10. Claim 11, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the selecting act further comprises the act of: managing media

handler selection for successive calling ones of the customers to effect a balancing of relative loads among the plurality of media handlers (i.e. handlers 200-212 in figure 2) (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-59). Besides this, Grove teaches comparing the bandwidth requirement to current bandwidth availability on each media handler (i.e. comparing the estimate of the distance between the source and each C-node (i.e. media handler) which includes the bandwidth charges for the client) (Col. 16, L. 21-Col. 17, L. 5).

11. Claim 12, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the passing act further comprises the act of:

determining a next media event for the calling one of the customers based on a correlation between pre-defined call contact states and status and actual call status for the calling one of the customers (abstract; and Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46); and

with the configuring act responsive to each determination in the determining act to reconfigure the available one of the plurality of media handlers (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 12, L. 4-Col. 13, L. 46).

12. Claim 13, Bogart and Grove disclose the invention substantially as claimed.

Bogart teaches the method for interfacing customers further comprising the act of: managing the available one of the plurality of media handlers (i.e. handlers

200-212) to define additional selected ones of a plurality of media services (i.e. a service call), media sources (i.e. resources/agents) and media endpoints (i.e. customer contacts such as phone, computer, etc.) for handling the customer contact from an agent communication device (i.e. agent 220 in figure 2) configured as a media endpoint in the configuring act (i.e. handlers 200-212) (Col. 1, L. 54-Col. 2, L. 36; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

13. Claims 15-19 are corresponding claims of claims 8-9,11-13. Therefore, they are rejected under the same rationale.

14. Claims 5,7,14,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogart and Grove as applied to claims 1,8,15 above, and further in view of Sonesh et al. (Sonesh) (6,046,762).

15. Claim 5, Bogart and Grove are relied upon for the disclosure set forth in the previous rejection. Bogart teaches the communication layer 106 manages the plurality of agent communication devices (i.e. resources) and it responsive to a request for customer contact with an available agent to select an available one of the plurality of agent communication devices for coupling with the corresponding one of the plurality of media handlers handling the corresponding customer contact (Col. 1, L. 54-Col. 2, L. 36; and Col. 4, L. 37-43; and Col. 5, L. 30-Col. 6, L. 50; and Col. 9, L. 22-Col. 10, L. 21).

Bogart and Grove fail to teach an agent manager coupled to each of the plurality of agent communication devices via the corresponding control interface, and the agent manager responsive to a request for customer contact with selection of an available agent. However, Sonesh, in the same field of endeavor having closely related objectivity, teaches an agent manager coupled to each of the plurality of agent communication devices via the corresponding control interface, and the agent manager responsive to a request for customer contact with selection of an available agent (Col. 3, L. 50-58; and Col. 5, L. 60-Col. 6, L. 8).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Sonesh's teachings of an agent manager coupled to each of the plurality of agent communication devices via the corresponding control interface, and the agent manager responsive to a request for customer contact with selection of an available agent, with Grove's teachings of system and method for high-performance delivery of web content using high-performance communications protocol between the first and second specialized intermediate nodes to optimize a measure of communications performance between the source and the destination, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of providing intelligent routing of messages/calls to agents for processing.

16. Claim 7, Bogart and Grove are relied upon for the disclosure set forth in the previous rejection. Bogart teaches wherein the plurality of media handlers each further comprise: a call sequencer interacting with selected ones of the plurality of media services defined by each media handler to maintain consecutive sequence numbers in the real time packets output from the media handler from various media sources during a customer contact session (Col. 1, L. 54-Col. 2, L. 36; and Col. 9, L. 22-Col. 10, L. 21; and Col. 15, L. 28-47).

Bogart and Grove fail to teach real time protocol (RTP). However, Sonesh, in the same field of endeavor having closely related objectivity, teaches real time protocol (RTP) (Col. 5, L. 15-31).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Sonesh's teachings of real time protocol (RTP), with Grove's teachings of system and method for high-performance delivery of web content using high-performance communications protocol between the first and second specialized intermediate nodes to optimize a measure of communications performance between the source and the destination, in the teachings of Bogart in multimedia customer care center having a layered control architecture, for the purpose of providing intelligent routing of messages/calls to agents for processing.

17. Claim 14 is corresponding claim of claim 7. Therefore, it is rejected under the same rationale.

18. Claim 20 is corresponding claim of claim 14. Therefore, it is rejected under the same rationale.

***Response to Arguments***

Applicant's arguments filed 08/17/07 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

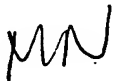
Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571)272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JASON D. CARDONE can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

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Examiner: Minh-Chau Nguyen  
Art Unit: 2145



**JASON CARDONE**  
**SUPERVISORY PATENT EXAMINER**